

REMARKS/ARGUMENTS

Applicants have received the Office Action dated June 9, 2008, in which the Examiner: 1) objected to claim 19; 2) rejected claims 1-5, 9, 11-15, 19, 21-22 and 25-34 under 35 U.S.C. § 102(e) as anticipated by Craddock (U.S. Pub. No. 2003/0061379); and 3) rejected claims 6-8, 10, 16-18, 20 and 23-24 under 35 U.S.C. § 103(a) as obvious over Craddock in view of White (U.S. Pub. No. 2003/0046657). With this Response, Applicants have amended claims 1, 9-11, 19-21, and 30 and canceled claims 33.

I. CLAIM 19

The dependency link of claim 19 had a typographical error and has been corrected. An amendment was also made to claim 19 (with similar amendments to claims 9-10 and 20) to include the word “code” which was inadvertently omitted. These amendments do not narrow the scope of the claim.

II. REJECTIONS UNDER 35 U.S.C. § 102(e)

Claim 1 has been amended to specify that the “source-routed virtual switch is adapted to receive a packet containing routing information, said routing information identifying an application in user application space that accesses said virtual switch.” Thus, the routing information in a packet can target a specific application, and the targeted application is not the virtual switch itself—claim 1 requires an “application...that accesses said virtual switch.” The Examiner pointed to paragraphs 19 and 24 of Craddock for this limitation (without the amendment). Those paragraphs, however, have no mention of packet routing information that identifies an application. Paragraph 19 of Craddock states that the switches and routers “route the packets to the appropriate end nodes.” Paragraph 24 specifies that a router “is capable of routing frames from one link in a first subnet to another link... .” Further, Craddock’s packets containing routing information that specifies specific source and destination ports. See Craddock at paragraph 61 (routing header 516 “is used to identify source and destination ports for data packet 512”). Craddock’s packets do not contain routing information that identifies an application. For at least this reason, claim 1 and its dependent claims are in condition for allowance over Craddock.

Dependent claim 2 specifies API code that “permits an application to register itself with the virtual switch to permit a resource to be assigned to said application.” The Examiner pointed to “LID” (local identifier) and “GID” (global identifier) in Figure 6 of Craddock for the limitation of claim 2. Craddock’s LIDs and GIDs do not permit applications that, per claim 1, access the virtual switch and thus are distinct from the virtual switch, to register with a virtual switch. Instead, the LIDs and GIDs of Craddock’s Figure 6 are assigned to ports. See Craddock paragraph 64. For this additional reason, claim 2 is not anticipated by Craddock.

Dependent claim 3 specifies API code that “permits an application to register itself with the virtual switch to permit a unique identifier to be assigned to said application.” The Examiner pointed to paragraph 25 of Craddock for this limitation. Craddock’s paragraph 25 says nothing about user space applications, registration of applications with a virtual switch, or application registration to permit a unique identifier to be assigned to such application. For this additional reason, claim 3 is not anticipated by Craddock.

Dependent claims 4, 5, and 9 also refer to the interaction between a user application space application and a virtual switch. Craddock lacks any such teachings as explained above.

Independent claim 11 has been amended in a manner similar to claim 1. Claim 11 and its dependent claims are thus allowable over Craddock for much the same reason as claim 1.

Dependent claims 12-15 and 19 are patentable over Craddock for the same or similar reasons as provided above regarding claims 2-5 and 9.

Claim 21 has been amended to require “an instruction usable for the virtual switch to receive a packet containing routing information, said routing information identifying an application in user application space.” As explained above, Craddock has no such teachings of routing information in a packet wherein the routing information itself identifies an application. The claimed “application” is not the virtual switch itself as claim 21 specifies that the application can “access said

software-implemented, source routed, virtual switch.” For at least this reason, claim 21 and its dependent claims are allowable over Craddock.

The Examiner stated that “[a]s to claims 25-29, they are rejected for the same reasons as claims 1-2, 4-5, 11, and 21 and 30 above.” Office Action p. 4. Applicants respectfully disagree with the Examiner. In claim 25, the method comprises executing an application to cause the virtual switch to provide data to the application. Thus, the application is not the virtual switch itself. As explained above, Applicants find no teaching in Craddock of registering such an application with a virtual switch. For at least this reason, claim 25 and its dependent claims are allowable over Craddock.

Applicants amend claim 30 require “means for receiving a packet containing routing information identifying an application in user application space, said application adapted to access said software-implemented, source-routed switch.” As explained above, Craddock lacks any such teaching or suggestion.

III. REJECTIONS UNDER 35 U.S.C. § 103(a)

Craddock has no teaching or even a suggestion of an interaction between application and a virtual switch as specified in various of the claims as discussed above. One of ordinary skill in the art would have found no mention in Craddock or any other art of record of a need for, or benefit of, a virtual switch that interacts with an application as claimed. For example, none of art of record even mentions a virtual switch as in claim 1 that “is adapted to receive a packet containing routing information, said routing information identifying an application in user application space that accesses said virtual switch.” Similar limitations are in other of the independent claims. Thus, absent hindsight from Applicants themselves, which is off limits as the Examiner is no doubt aware, none of claims would have been considered obvious to one of ordinary skill in the art.

The Examiner’s obviousness rejections specifically target claims 6-8, 10, 16-18, 20 and 23-24. Such claims depend from their base claims which contain limitations that are not present Craddock as explained above. White fails to satisfy the deficiencies of Craddock and thus claims 6-8, 10, 16-18, 20 and 23-24 are not obvious over the art of record.

CONCLUSION

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

/Jonathan M. Harris/

Jonathan M. Harris
PTO Reg. No. 44,144
CONLEY ROSE, P.C.
(713) 238-8000 (Phone)
(713) 238-8008 (Fax)
ATTORNEY FOR APPLICANTS

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
Legal Dept., M/S 35
P.O. Box 272400
Fort Collins, CO 80527-2400